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(54) **PHOTOVOLTAIC SOLAR CELL**

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(58) **Field of Classification Search**
None
See application file for complete search history.

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(57) **ABSTRACT**

A photovoltaic solar cell for generating electricity from sunlight is disclosed. The photovoltaic solar cell comprises a plurality of spaced-apart point contact junctions formed in a semiconductor body to receive the sunlight and generate the electricity therefrom, the plurality of spaced-apart point contact junctions having a first plurality of regions having a first doping type and a second plurality of regions having a second doping type. In addition, the photovoltaic solar cell comprises a first electrical contact electrically connected to each of the first plurality of regions and a second electrical contact electrically connected to each of the second plurality of regions, as well as a passivation layer covering major surfaces and sidewalls of the photovoltaic solar cell.

20 Claims, 12 Drawing Sheets